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Federal Agencies Committee Meeting Highlights

A Federal Agencies Committee (FAC) meeting was held on April 7, 1997, at the Chesapeake Bay Program Office (CBPO) in Annapolis, Md. Announcements and highlights from this meeting included:

- Arbor Day celebrations were conducted throughout the Bay watershed. The State of Maryland, for example, held a tree planting event in each county.
- *The Second Biennial Progress Report of the Agreement of Federal Agencies on Ecosystem Management in the Chesapeake Bay* has been prepared. Contact the CBPO for copies at 1-800-YOUR-BAY.
- A DoD Chesapeake Bay Program Conference will be held on November 18 and 19, 1997 in Norfolk, Va. The conference will be open to approximately 200 DoD personnel. Topics will address a wide range of environmental areas.
- Federal Facility Site Assessments have been conducted at Fort Belvoir, Fort Lee, U.S. Park Service (USPS), and Brentwood Post Office and Metro rail yards. The assessment teams provided the facilities with expert advice on such topics as shoreline and stream erosion, stormwater management, combined sewer systems, potential BayScapes sites, and public outreach.
- The Federal Land Stewardship Workgroup has established a mission statement and related initiatives. These initiatives include improving Bay access on federal lands, implementing a federal plan for riparian forest buffers, establishing stormwater management training, assisting in transportation planning initiatives, and participating in the Bay Partners Community Awards program.
- Revised GIS maps have been developed for the riparian forest buffer initiative. The initial versions showed the largest revisions to boundary areas occurring at U.S. Forest Service and National Park Service sites.

Implementation Committee Meeting News

An Implementation Committee (IC) meeting was held on April 17, 1997, at the CBPO in Annapolis, Md. Announcements and highlights from this meeting included:

- The Wetlands Workgroup is in the process of selecting watersheds from each jurisdiction to kick off the EPA Administrator's wetland's initiative. The prototype watersheds will be established by the 1997 Executive Council (EC) meeting. Community outreach and technical protocol development will be carried out during the summer of 1997 with draft plans developed by the fall of 1997.
- Chesapeake Bay Program personnel received two of the six EPA awards in 1997 for their work with equal employment opportunities and the riparian forest buffer initiative.
- American Rivers has designated the Potomac River as the seventh most endangered river in America. The organization cited West Virginia poultry farms and the Chapman's Landing development project in Charles County, Maryland as reasons for the designation.
- The Modeling Subcommittee gave a presentation on the preliminary analysis of the watershed model runs. Based on 1985-1995 data, the 40% phosphorus reduction goal will be achieved by the year 2000, but there will be a 20 million pound gap remaining toward the 40% nitrogen reduction goal. If no action had been taken toward reducing these nutrients, the model showed that there would have been a 9.0 million pounds increase in nitrogen and a 2.05 million pounds increase in phosphorus.
- The Tributary Strategy Workgroup has developed a list of Nutrient Reduction Alternatives (NRAs). The IC identified 12 of these NRA's as potential "gap closers" toward the nutrient reduction goals and is trying to determine whether these NRAs can also be implemented to meet the year 2000 timeframe.

State of the Bay: Stream Fencing Study

Dave Heicher, chief of the Water Quality and Monitoring Programs at the Susquehanna River Basin Commission (SRBC), reported on the preliminary results of a study to determine the effect of stream fencing on water quality in Pennsylvania streams. The purpose of the study was to document the response and establish biomonitoring protocol.

According to Heicher, two agencies are conducting the streambank fencing studies. The Pennsylvania Game Commission is conducting a study on 146 stream miles that pass through 426 properties. The Pennsylvania Department of Environmental Protection is studying 30 stream miles that pass through 50 properties.

To assess the effects of the stream fencing, monitoring data were collected before and after the stream fencing was installed. The monitoring included the classification of the stream channel morphology and cross-section geometry and assessments of riparian vegetation, water quality, habitat condition, macroinvertebrate species, and fish species.

According to Heicher, the most pronounced improvements during the study were seen in the reduced amounts of silt, clay, and sand in the water. Vegetation increased quickly with the stream fencing. Increases were also noted in the number of fish species and in macroinvertebrate productivity. The study showed that improved conditions in one area of the stream helped fish reach their upstream habitat.

Fort Detrick Plants Riparian Buffer for Earth Day 1997

Fort Detrick is the U.S. Army's home of military biomedical research and development, advanced medical technology, medical logistics, and global telecommunications. These programs address unique military medical requirements, whose goal is reducing casualties on the battlefield through improved prevention and treatment of injury and illness. In April 1997, however, Fort Detrick's mission expanded to include enhancing the health of the environment and encouraging environmental stewardship in the Fort Detrick community by hosting its first Earth Day event.

The Earth Day activities began on Friday, April 18, 1997, at the bubble-like structure known as the "H.O.T." (Henry O. Tuell) Dome. In his opening remarks, Col. Henry Tuell, Fort Detrick's garrison commander reaffirmed the post's commitment to protecting the environment. Tuell then recognized the efforts of Ms. Betty Boyland, natural resources program coordinator; Ms. Judy McKnight, volunteer coordinator; Ms. Eileen Mitchell, marketing officer; and Ms. Vickie Yontz, customer service representa-tive.

Boyland acquired funds for the Earth Day event and organized a tree planting and a fishing derby. McKnight recruited various volunteer groups, including the Boy Scouts, Cub Scouts, Girl Scouts, as well as military and civilian personnel and their families to participate in the tree planting. Mitchell coordinated the publicity of the event in the *Fort Detrick Standard*, on the post's e-mail system, and in local newspapers, radio and television stations. Yontz organized an environmental education exhibit.

The most significant event of Earth Day took place on Saturday when over 100 volunteers gathered to plant trees along Carroll Creek. Boyland organized this activity to coincide with the installation's stream restoration efforts. Carroll Creek flows through an area of the installation that is leased for cattle grazing. In an effort to reduce streambank erosion and improve the water quality of the stream, Boyland initiated a streambank fencing program to prevent the cattle from having direct access to Carroll Creek.

Although vegetative conditions adjacent to the stream have improved since the implementation of this program, Boyland wanted to enhance the riparian forest buffer by planting a variety of trees. A riparian forest buffer is an area of trees, usually accompanied by shrubs and other vegetation, which borders a body of water. The riparian area forms the transition between the aquatic and the terrestrial environments. This area is managed to maintain the integrity of stream channels and shorelines; to reduce the impact of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals; and to supply food, cover, and thermal protection to fish and other wildlife.

The tree planting activity also enabled Fort Detrick to contribute to the Army's larger effort of implementing the Chesapeake Bay Program's Adoption Statement on Riparian Forest Buffers. This initiative recognizes the importance of streams and rivers in the Chesapeake Bay watershed. The statement also established goals for the protection of all streams and shorelines by riparian buffers to the extent feasible; the conservation of existing forests along all streams and shorelines; and the restoration of riparian forests on 2,010 miles of stream and shoreline in the watershed by the year 2010.

With the help of Dale Pellitier and Jim Maier of Fort Detrick's motor pool, as well as the soldiers from the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID), approximately 900 trees were collected from the "Tree-mendous" Maryland Program and transported to the post for the tree planting event. A variety of trees were planted. Mike Kay, forester with the Maryland Forest Service, noted that planting a variety of trees contributes to a diversity of wildlife.

As the volunteers were planting the trees, Kay pointed out that they were planting the larger trees along the road and stream to create a visual barrier along the road and to shade the stream. Without shade, stream temperatures fluctuate to greater extremes during the summer and winter, making the streams unsuitable for many fish species and aquatic organisms. Since water temperature is a critical factor in fish spawning, the streamside vegetation is also important in maintaining future populations of fish. Kay also pointed out that the volunteers were planting shrubs in the center of the buffer to generate brushy growth. This growth will create habitat and escape cover that field dependent species need.

Fort Detrick's newly created buffer will also tie into the city of Frederick's greenways program. The long-range goal of this program is to establish a greenway, or linear forested park, from the Catoctin Mountains to the Monocacy River, which will provide a flyway and travel corridor for wildlife.

Fort Detrick's first Earth Day event was truly a celebration of the environment. Boyland is already looking forward to next year's Earth Day event where she hopes to plant famous and historic trees on the post's historic sites. Famous and historic trees are direct descendants of trees that are associated with significant people or events in American history. This proposed project will combine conservation with our nation's natural heritage.

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